

# Social Robots and Human-Robot Interaction Project

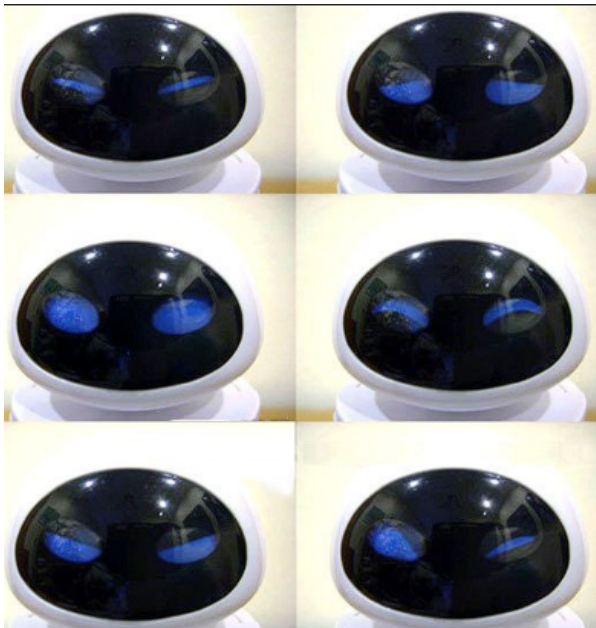
**Members:** 1 Ricardo Albuquerque  
2 Mikhail Shueb  
3 Rodrigo Pinto

## Vision and initial idea:

The idea is to have one (or more) of the characters of the book “Os Maias” act through the elmo robot and to attract people to read the book.

## Initial Sketches:

\*Insert Drawings of for the eyes of the robot (like Eve from Wall-E) here\*



Expressions can be extracted from here: <https://github.com/MargaridaEstrela/emoshow>  
Have the movement of the robot match the emotion of what it is saying

## Storyboarding:

**Livro : Asterix e Obelix - Personagem Panoramix**



**Interaction Step-by-Step:**

- Before the interaction : we give the user a spreadsheet with spaces to fill in with information gained from interacting with the robot (both in and out of character).
- During the Interaction : the participant will have 10 minutes to converse with the robot to obtain said information.
- The robot will respond either in character or in the LLM voice, answering truthfully either way.
- After the interaction : The user returns the spreadsheet with the information they got and we ask them about their thoughts.

**Information to get :**

- **Name**
- **Age**
- **Place of Origin**
- **Profession**
- **Passion**
- **Recipe of the magic potion (might refuse to say)**
- **Who can't drink the potion ?**
- **Wise advice (goodbye)**

**Describe potential situations.**

It could be used to get people more enthusiastic about reading.

The robot can quiz them

It can make the story feel more immersive

**What is the main aspect/characteristic of the robot?**

The robot is called Elmo and is a small robot composed of a head on stand. This head can turn and has a screen as a face which allows for customizable expressions.

The robot has two modes, the “acting” mode and the “research” mode. While in “acting” mode the robot acts as if it was a character of the book, expressing emotions with facial expressions and head movement. While in “research” mode the robot answers the users questions more coldly and directly.

**How to test the impact of the idea?:**

We want to hear the opinions of many users, having read the book or not, to get a good understanding of the accuracy and impact of our robot.

Compare the emotional response of the user depending on the mode

**Research question(s):**

**General questions:**

- Did you notice a difference between the two different modes? If so then how were they different?
- Was there something you felt was missing that would help you interact better with the robot?

**If the user has read the book:**

- Did you feel like the character was played faithfully and accurately?

**If the user hasn't read the book:**

- What was your impression of the character portrayed?
- Would using this robot help motivate you to read the book?

**How ?**

Using a LIKERT scale from 1 to 5 ( universal standard without a middle ground)

Group ID: 14

**Robot to be used:** Elmo

**Technical Characteristics/Videos:**


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**Study: Research Questions & Hypotheses**

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**Experimental study plan**

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